What is claimed is

1. A continuously variable magnetodynamic transmission comprising an input rotor (7) driven by a power source and provided with magnets (6) that are evenly distributed along its circumference, said input rotor (7) producing during its rotation a multi-polar magnetic field revolving with it in the ambient space that is surrounded radially outward, through a primary air gap (13), by a coaxial field concentrator (4) forming stationary, magnetically conductive pole shoes, said coaxial field concentrator (4) being surrounded, separated by a secondary air gap (12), by a coaxial stator (2) whose grooves (5) carry windings that are sequentially short-circuitable.

2. A transmission according to claim 1, **characterized in that** the windings of the stator (2) are sequentially short-circuitable in groups, and the number of groups of windings that are switched together corresponds to the number of pole shoes of the input rotor (7).

3. A transmission according to claim 1 or 2, **characterized in that** the number of poles of the input rotor (7) and output rotor (stator 2) is different by 2.

4. A transmission according to claim 3, **characterized in that** the number of poles of the input rotor (7) is 22 poles and that of the output rotor (stator 2) is 24 poles.

5. A transmission according to any of claims 1 through 5, **characterized in that** the field concentrator (4) is implemented in the form of a pole wheel and the individual pole shoes consist of radially oriented permanent magnets (6) between which, evenly distributed along the circumference, a magnetically conductive material is disposed.

6. A transmission according to any of claims 1 trough 6, **characterized in that** a control of the sequential switching of the short-circuited conductor loops takes place in the stator (2) according to the equation

$$T = 360/6 + tn\ ^\circ \qquad (5)$$

and that the adjuster is designed modular and consists, per branch, of 4 transistors in H-circuit arrangement and a hall sensor that detects the spatial position of the coil branch relative to the field concentrator poles.

7. A method for operation of a magnetodynamic transmission according to any of claims 1 through 6, **characterized in that** the converter operates using at least one or more of the following operating modes:

7.1 In the "neutral" mode all conductor loops are continuously short-circuited so that in this mode a torque-free position is reached independently from other conditions.

7.2 In the "drive" mode, three of the six branches are short-circuited. The selection of the two groups determines the driving direction. The shifting of the On and Off switching angles determines the torque.

7.3 In the "sum" mode the activated coil branches are actuated with a PWM signal in such a way that the coil current can be raised. This makes it possible to implement the functions "starter" and "booster".

7.4 In the "difference" mode the activated coil branches are actuated with a PWM signal in such a way that the coil current can be lowered. This makes it possible to implement the functions "generator" for the vehicle electrical system, or "regenerative braking".

8. A method according to claim 7, **characterized in that** the adjuster, with the input motor running, is synchronized with its frequency, and energy is thus added or removed in this manner at equal-phase or opposed phase voltage in the winding.